

ABSTRACT

In a first aspect, a method of managing work in progress within a small lot size semiconductor device manufacturing facility is provided. The first method  
5 includes providing a small lot size semiconductor device manufacturing facility having (1) a plurality of processing tools; and (2) a high speed transport system adapted to transport small lot size substrate carriers among the processing tools. The method further includes maintaining a  
10 predetermined work in progress level within the small lot size semiconductor device manufacturing facility by (1) increasing an average cycle time of low priority substrates within the small lot size semiconductor device manufacturing facility; and (2) decreasing an average cycle time of high  
15 priority substrates within the small lot size semiconductor device manufacturing facility so as to approximately maintain the predetermined work in progress level within the small lot size semiconductor device manufacturing facility. Numerous other aspects are provided.